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3720
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3780
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3840
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3900
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4140
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4200
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4680
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4860
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6000
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6160

<210> 4
<211> 1596
<212> PRT
<213> Rattus norvegicus

<400> 4
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            20   25   30
Ala Glu Ala Ser Gly Ala Ala Gly Asp Pro Ala Asp Ala Asp Pro Ala
        35   40   45
Thr Lys Leu Pro Gln Lys Asn Gly Gln Leu Ser Ser Val Asn Gly Val
    50   55   60
Ala Glu Gln Gly Asp Val His Val Gln Glu Glu Asn Gln Glu Gly Gln
65   70   75   80
Glu Glu Glu Val Val Asp Glu Asp Val Gly Gln Arg Glu Ser Glu Asp
                85   90   95
Val Arg Glu Lys Asp Arg Val Glu Glu Met Ala Ala Asn Ser Thr Ala
            100   105   110
Val Glu Asp Ile Thr Lys Asp Gly Gln Glu Glu Thr Ser Glu Ile Ile
        115   120   125
Glu Gln Ile Pro Ala Ser Glu Asn Asn Val Glu Glu Met Val Gln Pro
    130   135   140

Ala Glu Ser Gln Ala Asn Asp Val Gly Phe Lys Lys Val Phe Lys Phe
145 150 155 160
Val Gly Phe Lys Phe Thr Val Lys Lys Asp Lys Asn Glu Lys Ser Asp
165 170 175
Thr Val Gln Leu Leu Thr Val Lys Lys Asp Glu Gly Glu Gly Ala Glu
180 185 190
Ala Ser Val Gly Ala Gly Asp His Gln Glu Pro Ser Val Glu Thr Ala
195 200 205
Val Gly Glu Ser Ala Ser Lys Glu Ser Glu Leu Lys Gln Ser Thr Glu
210 215 220
Lys Gln Glu Gly Thr Leu Lys Gln Glu Gln Ser Ser Thr Glu Ile Pro
225 230 235 240
Leu Gln Ala Glu Ser Asp Gln Ala Ala Glu Glu Glu Ala Lys Asp Glu
245 250 255
Gly Glu Glu Lys Gln Glu Lys Glu Pro Thr Lys Ser Pro Glu Ser Pro
260 265 270
Ser Ser Pro Val Asn Ser Glu Thr Thr Ser Ser Phe Lys Lys Phe Phe
275 280 285
Thr His Gly Trp Ala Gly Trp Arg Lys Lys Thr Ser Phe Lys Lys Ser
290 295 300
Lys Glu Asp Asp Leu Glu Thr Ala Glu Lys Arg Lys Glu Gln Glu Ala
305 310 315 320
Glu Lys Val Asp Glu Glu Glu Lys Glu Lys Thr Glu Pro Ala Ser Glu
325 330 335
Glu Gln Glu Pro Ala Glu Asp Thr Asp Gln Ala Arg Leu Ser Ala Asp
340 345 350
Tyr Glu Lys Val Glu Leu Pro Leu Glu Asp Gln Val Gly Asp Leu Glu
355 360 365
Ala Ser Ser Glu Glu Lys Cys Ala Pro Leu Ala Thr Glu Val Phe Asp
370 375 380
Glu Lys Met Glu Ala His Gln Glu Val Val Ala Glu Val His Val Ser
385 390 395 400
Thr Val Glu Lys Thr Glu Glu Glu Gln Gly Gly Gly Gly Glu Ala Glu
405 410 415
Gly Gly Val Val Val Glu Gly Thr Gly Glu Ser Leu Pro Pro Glu Lys
420 425 430
Leu Ala Glu Pro Gln Glu Val Pro Gln Glu Ala Glu Pro Ala Glu Glu
435 440 445
Leu Met Lys Ser Arg Glu Met Cys Val Ser Gly Gly Asp His Thr Gln
450 455 460
Leu Thr Asp Leu Ser Pro Glu Glu Lys Thr Leu Pro Lys His Pro Glu
465 470 475 480
Gly Ile Val Ser Glu Val Glu Met Leu Ser Ser Gln Glu Arg Ile Lys
485 490 495
Val Gln Gly Ser Pro Leu Lys Lys Leu Phe Ser Ser Ser Gly Leu Lys
500 505 510
Lys Leu Ser Gly Lys Lys Gln Lys Gly Lys Arg Gly Gly Gly Gly Asp
515 520 525

Glu Glu Pro Gly Glu Tyr Gln His Ile His Thr Glu Ser Pro Glu Ser
530 535 540
Ala Asp Glu Gln Lys Gly Glu Ser Ser Ala Ser Ser Pro Glu Glu Pro
545 550 555 560
Glu Glu Thr Thr Cys Leu Glu Lys Gly Pro Leu Glu Ala Pro Gln Asp
565 570 575
Gly Glu Ala Glu Glu Gly Thr Thr Ser Asp Gly Glu Lys Lys Arg Glu
580 585 590
Gly Ile Thr Pro Trp Ala Ser Phe Lys Lys Met Val Thr Pro Lys Lys
595 600 605
Arg Val Arg Arg Pro Ser Glu Ser Asp Lys Glu Glu Glu Leu Glu Lys
610 615 620
Val Lys Ser Ala Thr Leu Ser Ser Thr Asp Ser Thr Val Ser Glu Met
625 630 635 640
Gln Asp Glu Val Lys Thr Val Gly Glu Glu Gln Lys Pro Glu Glu Pro
645 650 655
Lys Arg Arg Val Asp Thr Ser Val Ser Trp Glu Ala Leu Ile Cys Val
660 665 670
Gly Ser Ser Lys Lys Arg Ala Arg Lys Ala Ser Ser Ser Asp Asp Glu
675 680 685
Gly Gly Pro Arg Thr Leu Gly Gly Asp Ser His Arg Ala Glu Glu Ala
690 695 700
Ser Lys Asp Lys Glu Ala Gly Thr Asp Ala Val Pro Ala Ser Thr Gln
705 710 715 720
Glu Gln Asp Gln Ala Gln Gly Ser Ser Ser Pro Glu Pro Ala Gly Ser
725 730 735
Pro Ser Glu Gly Glu Gly Val Ser Thr Trp Glu Ser Phe Lys Arg Leu
740 745 750
Val Thr Pro Arg Lys Lys Ser Lys Ser Lys Leu Glu Glu Lys Ala Glu
755 760 765
Asp Ser Ser Val Glu Gln Leu Ser Thr Glu Ile Glu Pro Ser Arg Glu
770 775 780
Glu Ser Trp Val Ser Ile Lys Lys Phe Ile Pro Gly Arg Arg Lys Lys
785 790 795 800
Arg Ala Asp Gly Lys Gln Glu Gln Ala Thr Val Glu Asp Ser Gly Pro
805 810 815
Val Glu Ile Asn Glu Asp Asp Pro Asn Val Pro Ala Val Val Pro Leu
820 825 830
Ser Glu Tyr Asn Ala Val Glu Arg Glu Lys Met Glu Ala Gln Gly Asn
835 840 845
Thr Glu Leu Pro Gln Leu Leu Gly Ala Val Tyr Val Ser Glu Glu Leu
850 855 860
Ser Lys Thr Leu Val His Thr Val Ser Val Ala Val Ile Asp Gly Thr
865 870 875 880
Arg Ala Val Thr Ser Val Glu Glu Arg Ser Pro Ser Trp Ile Ser Ala
885 890 895
Ser Val Thr Glu Pro Leu Glu His Thr Ala Gly Glu Ala Met Pro Pro
900 905 910

Val Glu Glu Val Thr Glu Lys Asp Ile Ile Ala Glu Glu Thr Pro Val
915 920 925
Leu Thr Gln Thr Leu Pro Glu Gly Lys Asp Ala His Asp Asp Met Val
930 935 940
Thr Ser Glu Val Asp Phe Thr Ser Glu Ala Val Thr Ala Thr Glu Thr
945 950 955 960
Ser Glu Ala Leu Arg Thr Glu Glu Val Thr Glu Ala Ser Gly Ala Glu
965 970 975
Glu Thr Thr Asp Met Val Ser Ala Val Ser Gln Leu Thr Asp Ser Pro
980 985 990
Asp Thr Thr Glu Glu Ala Thr Pro Val Gln Glu Val Glu Ser Gly Val
995 1000 1005
Leu Asp Thr Glu Glu Glu Glu Arg Gln Thr Gln Ala Ile Leu Gln Ala
1010 1015 1020
Val Ala Asp Lys Val Lys Glu Glu Ser Gln Val Pro Ala Thr Gln Thr
1025 1030 1035 1040
Val Gln Arg Thr Gly Ser Lys Ala Leu Glu Lys Val Glu Glu Val Glu
1045 1050 1055
Glu Asp Ser Glu Val Leu Ala Ser Glu Lys Glu Lys Asp Val Met Pro
1060 1065 1070
Lys Gly Pro Val Gln Glu Ala Gly Ala Glu His Leu Ala Gln Gly Ser
1075 1080 1085
Glu Thr Gly Gln Ala Thr Pro Glu Ser Leu Glu Val Pro Glu Val Thr
1090 1095 1100
Ala Asp Val Asp His Val Ala Thr Cys Gln Val Ile Lys Leu Gln Gln
1105 1110 1115 1120
Leu Met Glu Gln Ala Val Ala Pro Glu Ser Ser Glu Thr Leu Thr Asp
1125 1130 1135
Ser Glu Thr Asn Gly Ser Thr Pro Leu Ala Asp Ser Asp Thr Ala Asp
1140 1145 1150
Gly Thr Gln Gln Asp Glu Thr Ile Asp Ser Gln Asp Ser Lys Ala Thr
1155 1160 1165
Ala Ala Val Arg Gln Ser Gln Val Thr Glu Glu Glu Ala Ala Thr Ala
1170 1175 1180
Gln Lys Glu Glu Pro Ser Thr Leu Pro Asn Asn Val Pro Ala Gln Glu
1185 1190 1195 1200
Glu His Gly Glu Glu Pro Gly Arg Asp Val Leu Glu Pro Thr Gln Gln
1205 1210 1215
Glu Leu Thr Ala Ala Ala Val Pro Val Leu Ala Lys Thr Glu Val Gly
1220 1225 1230
Gln Glu Gly Glu Val Asp Trp Leu Asp Gly Glu Lys Val Lys Glu Glu
1235 1240 1245
Gln Glu Val Phe Val His Ser Gly Pro Asn Ser Gln Lys Ala Ala Asp
1250 1255 1260
Val Thr Tyr Asp Ser Glu Val Met Gly Val Ala Gly Cys Gln Glu Lys
1265 1270 1275 1280
Glu Ser Thr Glu Val Gln Ser Leu Ser Leu Glu Glu Gly Glu Met Glu
1285 1290 1295

Thr Asp Val Glu Lys Glu Lys Arg Glu Thr Lys Pro Glu Gln Val Ser
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Glu Glu Gly Glu Gln Glu Thr Ala Ala Pro Glu His Glu Gly Thr Tyr
1315 1320 1325
Gly Lys Pro Val Leu Thr Leu Asp Met Pro Ser Ser Glu Arg Gly Lys
1330 1335 1340
Ala Leu Gly Ser Leu Gly Gly Ser Pro Ser Leu Pro Asp Gln Asp Lys
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Ala Gly Cys Ile Glu Val Gln Val Gln Ser Leu Asp Thr Thr Val Thr
1365 1370 1375
Gln Thr Ala Glu Ala Val Glu Lys Val Ile Glu Thr Val Val Ile Ser
1380 1385 1390
Glu Thr Gly Glu Ser Pro Glu Cys Val Gly Ala His Leu Leu Pro Ala
1395 1400 1405
Glu Lys Ser Ser Ala Thr Gly Gly His Trp Thr Leu Gln His Ala Glu
1410 1415 1420
Asp Thr Val Pro Leu Gly Pro Glu Ser Gln Ala Glu Ser Ile Pro Ile
1425 1430 1435 1440
Ile Val Thr Pro Ala Pro Glu Ser Thr Leu His Pro Asp Leu Gln Gly
1445 1450 1455
Glu Ile Ser Ala Ser Gln Arg Glu Arg Ser Glu Glu Glu Asp Lys Pro
1460 1465 1470
Asp Ala Gly Pro Asp Ala Asp Gly Lys Glu Ser Thr Ala Ile Glu Lys
1475 1480 1485
Val Leu Lys Ala Glu Pro Glu Ile Leu Glu Leu Glu Ser Lys Ser Asn
1490 1495 1500
Lys Ile Val Leu Asn Val Ile Gln Thr Ala Val Asp Gln Phe Ala Arg
1505 1510 1515 1520
Thr Glu Thr Ala Pro Glu Thr His Ala Tyr Asp Ser Gln Thr Gln Val
1525 1530 1535
Pro Ala Cys Arg Leu Asp Ser Arg Glu Pro Asn Arg Cys Trp Thr Lys
1540 1545 1550
Met Lys Asp Ala Lys Met Lys His Pro Val Pro Gln Pro Arg Glu Asp
1555 1560 1565
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1570 1575 1580
Leu Pro Arg Leu Gln Leu Lys Ala Pro Val Ser Lys
1585 1590 1595

<210> 5
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Myristylation site for src protein

<400> 5
Met Gly Ser Ser Lys Ser Lys Pro Lys Asp
1 5 10

<210> 6
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Myristylation and palmitylation site for yes protein

<400> 6
Met Gly Cys Ile Lys Ser Lys Glu Asp Lys
1 5 10

<210> 7
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Myristylation and/or palmitylation site for SSeCKS protein

<400> 7
Met Gly Ala Gly Ser Ser Thr Glu Gln Arg
1 5 10

<210> 8
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Myristylation site for G protein

<400> 8
Met Gly Ala Gly Ala Ser Ala Glu Glu Lys
1 5 10

<210> 9
<211> 10

<212> PRT
<213> Artificial Sequence

<220>
<223> Myristylation and palmitylation site for G protein

<400> 9
Met Gly Cys Thr Leu Ser Ala Glu Asp Lys
 1   5   10

<210> 10
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Palmitylation site for GAP-43 protein

<400> 10
Met Leu Cys Cys Met Arg Arg Thr Lys Gln
 1   5   10

<210> 11
<211> 23
<212> PRT
<213> Bos taurus

<400> 11
Lys Arg Phe Ser Ser Lys Lys Ser Phe Lys Leu Ser Gly Phe Ser Phe
 1   5   10   15
Lys Lys Asn Lys Lys Glu Ala
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<210> 12
<211> 23
<212> PRT
<213> Mus musculus

<400> 12
Lys Arg Phe Ser Ser Lys Lys Ser Phe Lys Leu Ser Gly Phe Ser Phe
 1   5   10   15
Lys Lys Ser Lys Lys Glu Ala
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<210> 13
<211> 17
<212> PRT
<213> Unknown

<220>
<223> Phosphorylation consensus site for MacMARCKS/F52 protein

<400> 13
Lys Lys Phe Ser Ser Lys Lys Pro Phe Lys Leu Ser Gly Phe Ser Phe
 1   5   10   15
Arg

<210> 14
<211> 20
<212> PRT
<213> Unknown

<220>
<223> Calmodulin binding domain for myosin light chain kinase protein

<400> 14
Lys Arg Arg Trp Lys Lys Ala Phe Ile Ala Val Ser Ala Ala Ala Arg
 1   5   10   15
Phe Lys Lys Cys
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<210> 15
<211> 23
<212> PRT
<213> Rattus norvegicus

<400> 15
Glu Thr Thr Ser Ser Phe Lys Lys Phe Phe Thr His Gly Thr Ser Phe
 1   5   10   15
Lys Lys Ser Lys Glu Asp Asp
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<210> 16
<211> 23
<212> PRT
<213> Rattus norvegicus

<400> 16
Lys Leu Phe Ser Ser Ser Gly Leu Lys Lys Leu Ser Gly Lys Lys Gln
 1   5   10   15
Lys Gly Lys Arg Gly Gly Gly
            20

<210> 17
<211> 23
<212> PRT
<213> Rattus norvegicus

<400> 17
Glu Gly Ile Thr Pro Trp Ala Ser Phe Lys Lys Met Val Thr Pro Lys
 1   5   10   15
Lys Arg Val Arg Arg Pro Ser
            20

<210> 18
<211> 23
<212> PRT
<213> Rattus norvegicus

<400> 18
Glu Gly Val Ser Thr Trp Glu Ser Phe Lys Arg Leu Val Thr Pro Arg
 1   5   10   15
Lys Lys Ser Lys Ser Lys Leu
            20

<210> 19
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> SSeCKS phosphorylation consensus sequence

<221> VARIANT
<222> (3)...(3)
<223> valine or isoleucine

<221> VARIANT
<222> (4)...(5)
<223> any amino acid

<221> VARIANT
<222> (7)...(7)
<223> any amino acid

<221> VARIANT
<222> (11)...(11)
<223> lysine or arginine

<221> VARIANT
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<223> any amino acid

<221> VARIANT
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<223> lysine or arginine

<221> VARIANT
<222> (18)...(18)
<223> lysine or arginine

<221> VARIANT
<222> (19)...(19)
<223> any amino acid

<221> VARIANT
<222> (20)...(20)
<223> lysine or arginine

<400> 19
Glu Gly Xaa Xaa Xaa Trp Xaa Ser Phe Lys Xaa Xaa Val Thr Pro Xaa
 1   5   10   15
Lys Xaa Xaa Xaa
            20

<210> 20
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequence

<400> 20
Trp Ala Gly Trp Arg Lys Lys
 1   5

<210> 21
<211> 54
<212> PRT
<213> Notophthalmus viridescens

<220>
<221> VARIANT
<222> (20)...(46)
<223> any amino acid

<400> 21
Ser Pro Leu Lys Ser Pro Tyr Lys His Pro Glu Gly Leu Leu Ser Pro
 1   5   10   15
Thr Lys Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
            20   25   30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Ser
        35   40   45
Ser Ser Glu Arg Leu Arg
    50

<210> 22
<211> 14
<212> PRT
<213> Rattus norvegicus

<220>
<221> VARIANT
<222> (6)...(9)
<223> any amino acid

<400> 22
Lys Lys Leu Phe Ser Xaa Xaa Xaa Xaa Lys Lys Leu Ser Gly
 1   5   10

<210> 23
<211> 10
<212> PRT
<213> Rattus norvegicus

<400> 23
Met Gly Ala Gly Ser Ser Thr Glu Gln Arg
 1   5   10

<210> 24
<211> 26

<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 24
gtgactggtg aggcctcaac caagtc
26

<210> 25
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 25
gtgactggtg agtactcaac caagtc
26

<210> 26
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 26
ggaagtccct tgtcgagcct cttcagtagc
30

<210> 27
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 27
gctcaggctt aagctcgctg tctggg
26

<210> 28
<211> 24

<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 28
cccttgaaga aaagcttcag tagc
24

<210> 29
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 29
ggcttaaaga agtcgtctgg gaag
24

<210> 30
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 30
cccttgtcga gcagcttcag tagc
24

<210> 31
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 31
ggcttaagct cgtcgtctgg gaag
24

<210> 32
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> Penetratin peptide

<400> 32
Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
 1   5   10   15

<210> 33
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> SSeCKS cyclin binding site

<400> 33
Leu Lys Lys Leu Phe Ser Ser Ser Gly Leu Lys Lys Leu Ser Gly Lys
 1   5   10   15

<210> 34
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> SSeCKS mutated cyclin binding site

<400> 34
Leu Ser Ser Ser Phe Ser Ser Ser Gly Leu Ser Ser Ser Ser Gly Lys
 1   5   10   15

<210> 35
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> SSeCKS mutated phosphoserine cyclin binding site

<221> VARIANT
<222> (6)...(6)
<223> phosphatidyl serine

<221> VARIANT
<222> (14)...(14)
<223> phosphatidyl serine

<400> 35
Leu Lys Lys Leu Phe Ser Ser Ser Gly Leu Lys Lys Leu Ser Gly Lys
 1   5   10   15